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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,503	02/15/2001	David Neil Slatter	B-4107 618601-6	9310

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EXAMINER
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DANG, DUY M

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 12/23/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/784,503

Applicant(s)

SLATTER, DAVID NEIL

Examiner

Duy M Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 14, 15, 17-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 4-6, 8-13 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. Applicant's preliminary amendment filed on 2/15/01 has been entered and made of record.

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this case, the instant Abstract contains 198 words.

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.

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(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

-In this case, the instant specification does not contain any of the section heading as listed above.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 7, 14-15, 17-19, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakabayashi (US Patent No. 5,675,672).

Regarding claim 1, Nakabayashi teaches an electronic image capture apparatus (figure 7) comprising:

an image detecting device adapted to capture a set of subimages or tiles corresponding to different areas of a document at known locations (i.e., the "handheld scanner" for performing first scan 28 and second scan 30 shown in figure 1 and mentioned in col. 4 lines 43-45. The first scan 28 and second scan 30 generate the image files denoted at 82 and 84 in figure 4 and mentioned in col. 6 line12-14, and those image files 82 and 84 correspond to the so called "a set

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of subimages or tiles corresponding to different areas of a document at known locations". The overlapping portion in this cited portion (col. 6 lines 12-14) and mentioned in figure 4 (the portion comprising the "recognize 3023 character" corresponds to the so called "known location". This interpretation is consistent with Applicant's disclosed specification page 30 lines 9-10, which states "The relative location of each file to its adjacent lines is known");

a processor adapted to receive the set of subimages produced by the device and to process the subimages to form a machine readable text document equivalent to the portion of the document covered by the set of subimages (see figure 7 and col. 6 lines 45-55: a computer system 106 comprises a personal computer 108 having a CPU 110; a handheld scanner 120 for reading documents e.g., 32 in figure 1. Note that the scanner 120 comprises first scan 28 and second scan 30 for generating image files 82 and 84 in figure 4 which correspond to the so called "machine readable text document"), wherein:

the processor includes an optical character recognition subroutine (i.e., the OCR 12 in figure 1 further denoted at 58 and 62 in the computer implemented process shown in figure 3) which is adapted to produce a first set of processable data files which each comprises a data set of characters corresponding to the characters appearing in a respective subimage in the set and the relative location of the characters in that subimage (i.e., the image files 50 and 52 in figure 3 and mentioned in col. 5 lines 10-11. Note that the location of the "THE LAZY DOG", for example, corresponds to the so called "relative location of the characters in that subimage"), and

the processor is adapted to stitch together the characters stored in the data files to produce a machine readable text document (i.e., the linking means 24 in figure 1

performs combining process 80 in figure 3 which produces image file 54 by combining image filed 50 and 52 according to col. 5 lines 58-60).

Regarding claim 17, it is noted that claim 17 is a method claim reciting the features called for in claim 1. Thus, claim 17 is also rejected for the same reasons as set forth in claim 1 above.

Regarding claims 3, and 19, Nakabayashi further teaches wherein the data in the first set of processable data files is stitched together to produce the machine readable document by allocating characters in the data files onto corresponding locations in a spatial template of machine readable document (see figure 3. Note that the combined image shown at 54 is the result of the stitching the data in the first set which comprises images 50 and 54; the “the lazy dog” shown in figure 3 corresponds to the so called “allocating characters...of the machine readable document”).

Regarding claim 7, Nakabayashi further teaches wherein the subimages overlap spatially at least by the width of the largest character which is expected in the document (see figure 3. Note that the subimages 50 and 52 overlap each other by the “fox jumped over the lazy dog”).

Regarding claim 14, Nakabayashi further teaches identify lines of text within each processable data file from the spatial distribution of the characters identified within each subimage (see “the lazy dog” shown in both subimages 50 and 52 of figure 3).

Regarding claim 15, Nakabayashi further teaches wherein the data in the processable data files comprises ASCII characters (see items 50 and 52 in figure 3. The text shown in these two items 50 and 52 are ASCII characters).

Regarding claim 18, Nakabayashi further teaches text record comprising coded representations of recognizable characters (i.e. the item 48 in figure 2 represents the coded

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characters included in the files 50, 52, and 54 of figure 3 according to col. 5 lines 12-19) are joined by comparing their data content at regions of expected overlap (see col. 13 line 30 to col. 14 line 15).

Regarding claim 21, it is noted that this claim recites a computer readable medium having a program recorded therein in which the program causes a computer running the program for carrying the method steps called in claim 1. The advanced statement with regard to claim 1 above are incorporated herein. Nakabayashi further teaches computer usable program and computer readable program code as mentioned in col. 13 lines 8-10 and 13 for example. While Nakabayashi fails to explicitly mention the use of a computer readable medium having a program recorded therein, such computer readable medium is inherently included in Nakabayashi in order for computer readable program code to be recorded/stored and executed by a computer.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakabayashi (US Patent No. 5,675,672).

The advanced argument with regard to claim 1 above are incorporated herein.

While Nakabayashi fails to teach the use of an electronic camera comprising a detector, lens, an actuator, and a controller for controlling actuator as required by claim 2, Nakabayashi

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does teach a dedicated scanning device for performing scanning function shown at 28 and 30 in figure 1 according to col. 3 line 65 to col. 4 line 1. It would have been obvious to one of ordinary skill in the art to recognize that the dedicated scanning device comprising an electronic camera. By using an electronic camera would provide a better image scanned in quality, reduce time in generating image, and more compact.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nakabayashi's system by using an electronic camera for that reasons.

*Allowable Subject Matter*

8. Claims 4-6, 8-13, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the closest prior art (Nakabayashi) fails to teach or suggest the features of: "wherein the processor establishes a co-ordinate system which defines the template of machine readable document whereby any point in the image document can be uniquely identified by its co-ordinates in the machine readable text".

Claims 5-6 depend from claim 4 and thus are allowable for the same reasons.

Regarding claim 8, the closest prior art (Nakabayashi) fails to teach or suggest the features of: "wherein where only one data file contains a character at a given location in the machine readable text document the processor is adapted to allocate that character to that location."

Claims 9-13 depend from claim 8 and thus are allowable for the same reasons.



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Regarding claim 20, the closest prior art (Nakabayashi) fails to teach or suggest the features of: "wherein in the event that more than one text record contains a character for the same region of the text document, as occurs at overlap area, then logical rules are applied to select which character to allocate that region."

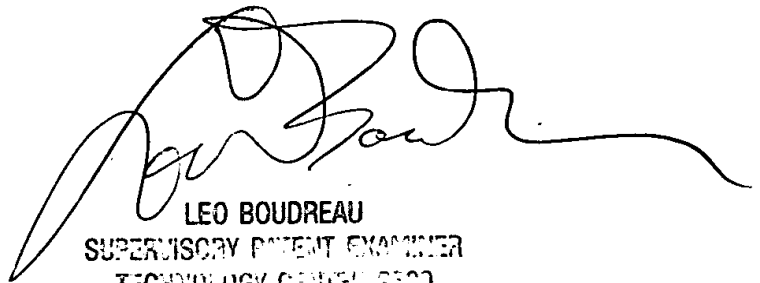
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M Dang whose telephone number is 703-305-1464. The examiner can normally be reached on Monday to Thursday from 6:30AM to 5:00PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.



dmd  
12/16/03



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